

**Clearance Record**  
**FIELD REVIEW COMMENT LOG**

<b>Originating Office:</b> AIR-132	<b>Document Description:</b> Division Review PROPOSED TSO-C159c	<b>Project Lead/Reviewer</b> Dave Robinson	<b>Reviewing Office:</b>	<b>Date of Review:</b>
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<b>Commenter</b>	<b>Page &amp; Paragraph</b>	<b>Comment</b>	<b>Reason for Comment</b>	<b>Suggested Change</b>	<b>Comment Resolution</b>
ACE-114 R. Hirt	Page 1 Para 3.a	Use of acronym that is not spelled out. “....supporting an aircraft SATCOM (SBD) .....	The first use of acronym is not spelled out.	Please spell out the SBD when it first appears.	Concur, change made
ACE-114 R Hirt	Page 1 Para 3.a	Use of acronym that is not spelled out. “....and SATCOM (SBB) .....	The first use of acronym is not spelled out.	Please spell out the SBB when it first appears.	Concur, change made
Jerry Ramos ANM-130L	Page 2, Table 1B	Acronyms for “HGA” and “IGA” are not defined.	Lacks clarity.	Spell out acronyms (e.g. Intermediate Gain Antenna for “IGA” and High Gain Antenna for “HGA”) where they initially appear in the document.	Concur, change made
Ray Mei ANM-130S	Page 4, Paragraph 3.c.(4)	Need to know which document is being referenced. “We determined the failure condition specified in paragraphs <b>3.c.(1) and 3.c.(2)</b> based on NGSS equipment...”	Lacks clarity.	We determined the failure condition specified in paragraphs <b>3.c.(1) and 3.c.(2) of this TSO</b> based on NGSS equipment...	Concur, change made

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AFS B. Verna	Page 1, Para. 3	This is two editorial comments in one. RTCA/DO-326 reference and title are not up to date.	1) DO-326 is not titled "Information Security". 2) DO-326 is on revision A as of August 6, 2014.	Either accept comment 2 below and this comment becomes overcome by events, or recommend the following:  1) Change title to read as: "Airworthiness Security Process Specification".  2) Update DO-326 to most current revision level 326A.	Concur, change made
AFS B. Verna	Page 1, Para 3 exception clause, and the Note	1) I suggest modifying the language paragraph 3 to accept DO-262B, including Change 1, information security requirements in 2.2.3.10 and Appendix D section 3.5.  2) I suggest modifying the language in the Note to acknowledge the information security policy in PS-AIR-21.16-02 because security requirements may be imposed based on the design and intended function.	1) DO-262B, including Change 1, performs a security risk assessment according to guidance in DO-326A in sections 2.2.3.10, and Appendix D, section 3.5. Based on the security risk assessment, spoofed ACARS messages could lead to a major failure condition classification, which will drive FAA special conditions to mitigate this condition through either design or operational controls. I think it would be prudent to accept the security risk assessment in DO-262B, including Change 1, and not reject it as current language in paragraph 3 of the TSO does.  2) AIR has a policy statement that invokes security assessment, and possibly, design or operational requirements per PS-AIR-21.16-02.	Reword paragraph 3, as follows.  "REQUIREMENTS. New models of NGSS equipment (including the Aircraft Earth Station (AES) transceiver equipment, auxiliary equipment, and associated antenna) identified and manufactured on or after the effective date of this TSO must meet the MPS qualification and documentation requirements in RTCA, Inc., document RTCA/DO-262B, Minimum Operational Performance Standards for Avionics Supporting Next Generation Satellite Systems (NGSS), dated June 17, 2014; including Change 1 to Appendix D, dated December 15, 2015.  Reword NOTE to read as follows:	Partially Concur, accordingly (concur with respect to Change 1 to Appendix D, but reference must still be made to DO-326 to cover Appendix E which has not changed from baseline DO-262B).

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				<p><b>“Note:</b> There may be security requirements for the NGSS equipment based on the design and intended function. For more information see Aircraft Certification Service (AIR) policy statement PS-AIR-21.16-02.”</p>	
Tom Kraft	Page 4, paragraph 3.c.(4)	The paragraph implies that failure condition classifications for this equipment are based on the operating environment. Failure condition classification should be based on the severity of the effect on the intended operations. Changes to the intended operations in procedural airspace area operations could also impact equipment performance and safety considerations.	Refer to “(4) NGSS equipment is intended for <b>procedural airspace area operations</b> . We determined the failure condition ... based on NGSS equipment operating as an <b>approved Long-Range Communication System (LRCS) in oceanic airspace area environments</b> . Use ... in <b>other operating environments (for example, high-density terminal or en route domestic airspace)</b> may impact equipment performance and safety considerations, ...”	<p>(4) <del>NGSS equipment is intended for procedural airspace area operations.</del> We determined the failure condition specified in paragraphs <b>3.c.(1) and 3.c.(2)</b> based on <b>the assumption that the NGSS equipment is intended for applications that typically supplement HF voice communications in procedural airspace area operations operating as an approved Long-Range Communication System (LRCS) in oceanic airspace area environments.</b> Use of NGSS equipment <b>for other purposes in other operating environments</b> (for example, <b>where the equipment is required to apply the separation minimum in procedurally controlled airspace, or for some applications in</b> high-density</p>	Concur, change made

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				terminal or en route domestic airspace) may impact equipment performance and safety considerations, which may include a need to develop the NGSS equipment to a higher design assurance level than specified in paragraphs 3.c.(1) through 3.c.(3).	
Ronnae Darby	Page 1 Page 4	A comma should follow "equipment design" in the note at the bottom of page 1 And "purpopes" should be "purposes" on page 4		Add comma and correct spelling.	Concur, change made.